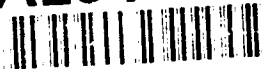


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THE ECONOMICS
OF
THE DEPARTMENT OF DEFENSE HEALTH CARE SYSTEM

An Individual Study Project

by

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ABSTRACT

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Recent world events released the forces of change. The sudden and drastic resolution of the "East-West" conflict eliminated the "threat" to American security and negated the large American military-industrial complex. Many nations, including the United States, are now quickly and painfully accommodating that change and restructuring their economies. Drastic defense budget reductions are part of this restructuring. Resource constraints and the need to control costs have created a renewed interest in and debate on the Department of Defense (DoD) Health Care System.

It is my contention that DoD should study these forces (trends and issues) exerting pressure for change so as to make proactive changes in the DoD Health Care System. This paper will (1) provide a brief historical overview of the DoD Health Care System, (2) identify and discuss major economically pertinent trends and issues increasing social pressures on the American Health Care System, and (3) analyze how these probable trends and issues create demands/pressures on the DoD Health Care System. This paper concludes with feasible DoD health care management systems for future DoD health care missions.

INTRODUCTION

In the post-Cold War era, the United States Congress continues to debate defense and domestic issues. These debates are fraught with ambiguity and uncertainty. In the defense arena, Congress has declared there is a greatly reduced military threat to the United States; therefore, drastic reductions in budget, force structure, and personnel strength are underway. In the domestic arena, Congress has turned their attention to stressing societal issues such as soaring health care costs. The expected reduction in resources and the need to control costs have created a renewed interest in and debate on the DoD Health Care System. Many believe that the competing missions of providing peacetime health services, supporting military operations, and maintaining wartime medical readiness require organizational and operational changes in the DoD programs to control costs.

The future missions, organization, and management of the DoD Health Care System will be influenced by forces exerting pressure for change. After a brief historical overview of the DoD Health Care System, I will identify and then discuss the major economically pertinent trends and issues that are increasing social pressures on the American health care system. Following my discussion, I will analyze how these probable trends and issues create demands/pressures on the DoD Health Care System. Then I will use the information to propose feasible DoD health care management systems for future DoD health care missions. I will conclude with how the DoD may react to these trends. The scope of

this study is limited to the effect future civilian changes are likely to have on the DoD patient care mission in peace and war.

Overview

The appropriate organization for the management of the DoD Health Care System has been a long-standing issue. In 1949, the Chief of Staff of the U S Army, General Dwight D. Eisenhower, made the following written recommendation to the Secretary of Defense: ". . . immediately institute studies and measures intended to produce, for the support of the three fighting services, a completely unified and amalgamated (single) Medical Service."¹ Since that time, approximately every four to six years, the same question has been studied and some incremental modification has occurred. The military services have rejected all major organizational changes in favor of the retention of their respective independent health care systems.

The Fiscal Year 1990 House Appropriations Committee directed reorganization of the DoD's medical programs into a more centralized organization with one person in charge. However, the Senate Appropriations Committee rejected the proposal to "give the Assistant Secretary of Defense, Health Affairs [ASD(HA)] time to analyze the needs of health management and organization."² In November 1989, the Conference Appropriations Committee directed DoD to submit a plan by June 30, 1990, for "reorganizing the various medical programs into a more centralized program, providing for

more budget, staffing, and programmatic accountability at the ASD(HA) level. It further directed that the plan address and resolve the following issues: (1) increased centralization to eliminate duplicate missions and funding responsibilities, (2) increased accountability for budget preparation, budget execution, and staffing, (3) improvements in workload measurement, (4) a strategy for implementing the plan, and (5) a unified medical budget."³

In June 1990, the ASD(HA) forwarded a report entitled THE REORGANIZATION OF MILITARY HEALTH CARE to Congress. The report emphasized centralized accountability and decentralized execution. A single accountable office would be established within the DoD for health issues. Among other things, it would control the medical budget and medical readiness would remain central to the organizational design. The ASD(HA) and the three Surgeon Generals would manage and oversee the DoD Health Care System in a participatory style organization.⁴

In November 1990, the Deputy Secretary of Defense asked the Director of Administration and Management to conduct a study to

"determine the optimum organization of medical functions within the Department of Defense to achieve the following objectives: (1) to provide medical services and support to the armed forces during combat operations, (2) to provide medical services and support in peacetime to members of the armed forces, their dependents, and others entitled to medical care provided by the Department of Defense; and (3) to achieve fully both of the above objectives at the lowest feasible cost to the taxpayers."⁵

In October 1991, the Deputy Secretary of Defense, Donald J.

Atwood, gave the ASD(HA), Dr. Enrique Mendez, authority, direction, and control over medical facilities, programs, and funding. The ASD(HA) is now responsible for developing and submitting a unified DoD medical budget request beginning with the fiscal 1993 budget. He must also prepare the annual medical planning guidance for use by the military departments in developing their budgets and Program Objective Memoranda (POMs). The directive also created a Defense Medical Advisory Council which the ASD(HA) will head. This new policy expands the ASD(HA)'s authority.⁶

Decentralized execution retains the separate military services' independent health care missions. The DoD provides comprehensive medical care through the Military Health Services System (MHSS), that affords a full range of health care from small troop medical clinics and shipboard dispensaries to sophisticated medical centers, and the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). The DoD Health Care System assumes total care responsibility for all active duty personnel, retirees, and their family members. While active duty personnel have all of their health care costs covered, their family members, retirees, and retirees' family members must pay CHAMPUS deductibles and co-payments when they obtain health care from civilian providers. The DoD Health Care System is funded as part of the annually appropriated defense budget and, therefore, must compete with other programs. Future funding levels of the DoD Health programs will certainly face reduced federal budgets. Resource constraints and cost controls are major issues today. These major economic issues

along with other societal and technological trends are likely to place increasing pressures on the American health care system into the twenty-first century. Although these major trends and issues are interrelated, they can be classified into two categories: (1) affordable and accessible health care and (2) the interdependence of economics, society and technology.

Affordable and Accessible Health Care

The future organization of the civilian health care systems depend on costs which are affordable but do not impede access to quality care. These same economic issues will be felt in the delivery of military medicine and the DoD Health Care System. With this in mind, I identified the following economic trends and issues related to the affordability and accessibility of health care.

The aging of the U.S. population poses a culture shock for America. Medicare will consume an increasing portion of the U.S. budget until about 2020, and catastrophic illness and long term care will be health care issues weighed against other national needs.^{7,8} More attention will be devoted to insurance programs that cover long-term care, and workers will pay a larger proportion of the bill for their own future costs.⁹ Aging of the American population will contribute significantly to the tripling of health care costs in the U.S. between 1987 and 2000.¹⁰ Because of these issues, intergenerational conflict is expected and the nation's society will stiffen and grow less flexible. Aging of our nation

is seen as the most critical issue affecting the future of our civilian health care system.¹¹

The second trend sets hospitals against managed care organizations. Hospitals will become the treatment centers only for major, complex diagnosis and surgery.¹² By 2010, most of these hospitals will be owned by three to six megaconglomerate companies, such as Humana and Hospital Corporation of America, all structured on a for-profit model with market place incentives emphasizing those services that are most profitable.¹³ Small community hospitals will become a thing of the past and be replaced by managed care enterprises like Health Maintenance Organizations (HMOs) and Preferred Provider Organizations (PPOs) operating outpatient and urgent care centers.¹⁴

The third trend deals with national policy. The U.S. will not have a coherent national health policy. The federal government will seek to limit its expenditures by tinkering with reimbursement mechanisms, but will avoid comprehensive policy making.¹⁵ Health care as a human right--an implicit American social ideal--will continue to be addressed as public payment for private medicine.¹⁶

In summary, both the public and private health care systems will continue to address the issue of health care costs. The insurance industry and government programs will require patients to pay a larger portion of health care costs. Smaller hospitals will either close or be bought up by large corporations. Managed Care Programs will become more popular as costs continue to rise.

Economics, Society and Technology

Economic concerns will not be separated from social issues, but will become more interdependent in the future. A declining formal education system and advancing technologies will cause social change. The following social and technological trends and issues that will indirectly impact economics and produce challenges for the Civilian and DoD Health Care Systems were identified.

Demands will grow for industries to increase their social responsibilities because our current institutional structures, such as government, are not the answer to managing complexity.^{17, 18} This will cause corporations to increasingly play a larger role, taking over governing functions and providing more services in a privatized society.¹⁹ However, social services in the for-profit health care system will decline, thus communities will be forced to address drug abuse, violence, teen pregnancy, etc. as societal value problems.²⁰ Also, the soaring costs of prolonging the lives of the very elderly will become unacceptable to society, but refusing them treatment that could preserve their lives for additional months or possibly years will be equally unacceptable to many people.²¹

The second trend links information networks and consumers. The Information Age will establish the legitimacy and importance of self-care.²² Consumers will have greater access to medical information through computer networks and, as more concerned consumers, patients will demand a greater role in their own health

care.²³ Individuals will have greater control over their own health as pharmacies increasingly stock over-the-counter medications that were once available by prescription only.²⁴

The third trend deals with technology and education. The U.S. will have high growth in services and information industries such as health care, computers, and financial services.²⁵ This will require personnel with technical skills whom the current formal U. S. educational system, facing long-term decline, may not provide in sufficient quality and quantity.²⁶ As the movement toward an information society grows, over half of all service workers in the U. S. will be involved in collecting, analyzing, and retrieving information as a basis of knowledge.²⁷ As an example, routine laboratory tests will be conducted at home and results will be transmitted via computer to a central clearinghouse for diagnosis.²⁸ This will result in computers being increasingly used for decision making.²⁹

In summary, technology will be the force behind change, especially in telecommunications, computers, electronic applications and links of all kinds.³⁰ Our society will undergo great changes, but within a framework of continuity. Many nations in the world will be undergoing revolutionary changes in their societies, while our society will continue in a democratic free market style. However, increasing complexity from multinational/international corporations will bring a new meaning to the words bureaucracy and responsibility. These large corporations will act like the "company stores" of the past as they

provide for their employees needs. When the formal educational system cannot provide the needed technical skills, these same corporations will develop their own training and educational programs. These programs will use computers to access information and to do research for the users. Without doubt, health care will remain a very vital and necessary concern to all industries in the United States.

DISCUSSION

The problem of providing satisfactory medical service to all the people of the United States at costs which they can meet is a pressing one. At the present time, many persons do not receive service which is adequate either in quantity or quality, and the costs of service are inequitably distributed. The result is a tremendous amount of preventable physical pain and mental anguish, needless deaths, economic inefficiency and social waste. Furthermore, these conditions are largely unnecessary. The United States has the economic resources, the organizing ability and the technical expertise to solve this problem.³¹

Ray Lyman Wilbur,
Secretary of the Interior
October 31, 1932

Affordable and Accessible Health Care

The health care "crisis" has been with us for a long time. The continuing crisis results from our social belief that

health care is a human right and poor people should not be denied care simply because they can not afford it. In today's society, this equates mostly to affordable hospital care for everyone.

The image of the hospital as a charitable institution where one went to die--or to be isolated when afflicted with an infectious disease--predates the United States.³² The Judeo-Christian vision of moral responsibility produced the rationale for providing these charitable hospitals. Hospitals have always been recognized as organizations with strong service obligations.³³ As medicine began to be curative, the hospital became a place where lives could be saved. Hospitals became almost indispensable to members of society. Accordingly, hospital care was seen as falling outside the principles of free enterprise.

The public view of hospital care changed slowly, as for-profit hospitals became more common. By 1968 there were 769 proprietary hospitals, 11 percent of all hospitals in the United States. By 1979 due to corporate-owned multi-institutional hospital chains, there were over 1,000 proprietary hospitals constituting 15 percent of nongovernmental acute general care hospitals and 50 percent of nongovernmental psychiatric hospitals.³⁴ Within this "medical-industrial" complex a growing network of even larger private corporations engaged in the business of supplying health care services to patients for profit.

Health care has become one of the leading "industries" in the United States. National health expenditures steadily increased from 5.9 percent of the Gross National Product (GNP) in 1965 to 12

percent in 1990. This represents a total dollar increase from \$42 billion in 1965 to over \$600 billion in 1990. By the year 2000, it is estimated that national health expenditures will consume 15 percent of the GNP and cost over \$1.5 trillion in goods and services.³⁵

Accompanying this phenomenal rise in expenditures is the increased portion of health care paid for by public reimbursement. Federal Medicare and Medicaid outlays grew from \$60 billion in 1980 to \$175 billion in 1990; they are projected to reach \$460 billion by the year 2000. Without health care reform legislation, medicare expenditures will increase even more in the twenty-first century due to the aging of the American population.

The economic growth during the 1980s provided the "best of times" for state governments. State spending between 1982 and 1989 grew at an annual rate of 8.5 percent, twice the rate of inflation.³⁶ The tax windfalls allowed states to expand budgets for education, health care, and welfare. Some states broadened their definitions of eligibility under the Medicaid program. Medicaid funding became the fastest growing item in state budgets. Now, several states are attempting to control health care costs by tightening these Medicaid requirements while the continued unemployment problem in many industrial areas has increased demand for public assistance.

Oregon, for example, wants to introduce explicit Medicaid rationing, and has developed a rationing list of priority-type treatments. The idea is to "decide which treatments should have

priority, and then to replace the comprehensive Medicaid program that covers only 40 percent of the poor by a limited program that covers everyone, but only for treatments on the priority list."³⁷ Since the Oregon proposal rations care only for the poor, the federal government probably will not grant Oregon the necessary waiver to put its program into effect.

Both Medicaid and Medicare are being attacked as expensive government benefit programs which are still insufficient to meet everyone's need. The vast "baby boom" generation, now approaching middle age, threatens to consume an increasing portion of the national budget and still have insufficient resources for health care. This leads many to believe that any national health care program will not control rising health care costs.

The United States is the only industrialized nation that does not have a national health insurance program. Yet, approximately 85 percent of the population is covered through some form of health insurance.³⁸ Most Americans are covered through their employer-paid group insurance programs, while the elderly and disabled are covered under a federal program--Medicare--and the poor are covered by a state-federal program--Medicaid. In 1986, patients paid 25 percent of personal health care costs, private insurance paid 31 percent and government paid 41 percent. These percentages are projected to remain approximately the same for the entire decade of the 1990s.³⁹ A national health insurance program would increase the government dollar percentage.

Health care affordability and accessibility remain a hotly

debated political issue. President Bush proposed a plan which "gives everyone [in the U. S.] access to the world's best health care."⁴⁰ President Bush would limit growth in Medicare and Medicaid expenditures by requiring higher premiums for the wealthy and capping federal payments to states. These savings would offset the costs of a universal access program to health insurance through tax credits and vouchers. Other elements of President Bush's health care plan would allow small businesses to pool purchases of health insurance plans, ban state laws inhibiting coordinated care systems, and require insurers to cover people with pre-existing diseases. His plan calls for continued use of the existing system of doctors, hospitals and Health Maintenance Organizations (HMOs) for health care delivery.⁴¹

Opponents have concerns with President Bush's health care plan. They believe that the caps on Medicare and Medicaid spending growth would adversely effect the poor, the elderly, and the handicapped, and that tax credits and vouchers would not provide enough money for the uninsured to meet insurance premium costs. Furthermore, the program would depend upon individuals to use the credits to purchase their own insurance, which many won't do. Hence, they won't be covered.

The most popular and likely Democratic plan is the "Pay or Play" Plan proposed by Sen. George J. Mitchell of Maine. This plan guarantees coverage by (1) requiring employers to either provide health insurance or pay into a general system where their employees would receive coverage and, (2) increase corporate surtaxes or

income taxes to supplement state and federal funds for coverage of the poor and nonworkers. The plan would encourage private insurers to provide expanded job-based health coverage for the employed or make states tax employers and provide insurance for workers whose employers choose not to "play". Other elements of the plan would develop federal boards to set spending goals and negotiate rates with providers, impose limits on all medical costs, limit price variations, promote managed care incentives, and ban exclusions for preexisting conditions.⁴²

Critics have concerns with the Pay or Play Plan. The federal tax is tentatively set at 7 percent of payroll, whereas a \$2,500 family health insurance premium for a worker earning \$20,000 costs 13 percent of payroll. This would cause most employers--both large and small--to pay the tax and drop existing coverage. Within five years there would be more and more government control, restrictions, and rationing of services.⁴³

While these different proposals for health care basically reflect partisan thought, neither proposal has received great attention during times of economic prosperity. Recent debates cause Americans to wonder if there ever will be bipartisan agreement on how to structure our health care system so that it is affordable and accessible for all Americans, especially during times of economic recession.

In summary, the economics of health care will become an even greater societal issue in the twenty-first century when a greater percentage of the population will be elderly. This will cause a

greater demand for health care and, consequently, an increase in health care costs. The care for the elderly will then conflict dramatically with the care for the youth. The problems of today will be exacerbated. The cry to ration medical services in the cause of economics will take on new meaning. "The technical challenges in developing new modalities will pale in comparison to the moral dilemmas our society faces in applying them. One of the most poignant of these is the distribution of medical resources."⁴⁴

Economics, Society and Technology

The United States' economic growth of the 1980s did not continue into the 1990s. Many believe this was due to the sudden and drastic resolution of the "East-West" conflict that eliminated the "threat" to American security and reduced the large American military-industrial complex. Certainly recent world events have released the forces of change and we are now quickly and painfully accommodating to that change. The nations comprising the former Soviet Union, all of Europe, and other major powers are restructuring their economies. The U. S. must do the same.

J.J. Sweeney, an economist, lists the following economic trends in the U. S. economy: increasing federal budget deficit, increasing trade deficit, sustained unemployment, declining number of quality jobs, and decreased manufacturing productivity.⁴⁵ While there are many causes for the deterioration of the U. S. economy, Sweeney suggests two that have particular relevance. First,

"corporate management pursues short-term profits at the expense of long-term growth. Investment decisions and resource allocation do not promote stable long-run growth in income or employment." Second, "a noninterventionist government policy allows constant erosion in competitive ability and productive resources."⁴⁶ Sweeney believes government must play a critical role in enhancing U. S. competitiveness, and that the U. S. "cannot rely on the private marketplace, often dominated by large multinational corporations, to allocate resources efficiently, distribute income fairly, maintain minimum standards of behavior, and enhance the growth potential of the U. S. economy."⁴⁷ Another economist concurs: "In the United States, the twin megadeficits show no sign of abating; earnings, productivity, and capital investment remain stalled; Wall Street continues to hold corporations hostage to short-term profits;...and Big Business seems paralyzed by the same debilitating bureaucracy condemned in Big Government."⁴⁸ Where does this place the health care industry in our economy?

Large health care corporations provide services in a privatized society and entrepreneurs search for ways to use new technologies. New technologies in the medical field have produced paradoxical results: While they have increased employment, they have as well complicated the efforts to control costs. Hilary Stout, a staff reporter for the Wall Street Journal, states, "while many Americans feel the system is expensive, inefficient, inflationary, and unfair, they have become increasingly reliant on it."⁴⁹ Stout offers several interesting observations on the

economics of contemporary American medicine:

"Nationwide, over the past year the health-services industries have been the only major sector to the national economy to grow. More than nine percent of all private, nonagricultural workers in the United States are now employed in the health delivery services, up from three percent in 1960. Health care is even helping offset the U. S. trade deficit: Exports of medical equipment and pharmaceuticals consistently post one of the United States' biggest trade surpluses. But this dependence on an expanding medical industry for economic health clashes with the desire to trim costs."⁵⁰

Technology will continue to affect medical employment opportunities--as in many other fields. It will thus play an important role in our economy. But will America's declining formal educational system provide technically proficient workers? Literacy will take on new meaning in the future due to new technology. Technology will challenge our education system even more. Appropriate education can increase our productivity, provide economic growth, and promote our social integration. New technologies and new skills will change many occupations. The information age will allow more "home teaching" programs for corporate education and training programs. This same method of teaching could compete with both the private and public school systems and could reverse the declining educational trend in the United States.

Information technologies associated with the invention of the computer has ushered in the Third Industrial Revolution, which has been called the Information Age. This high-tech information age

has influenced global competitiveness as well as changed the environment in our own homes. Today it is possible through computer networks, facsimile, and other mass communication modes to provide a global service. In the United States and other advanced nations of the world, this technology has resulted in the "break-up of mass diverse, differentiated, i.e., demassified social systems."⁵¹ The societal changes associated with this revolution have not been understood well by our policy makers.

Today, and into the future, the United States must rapidly convert this new technology into commercially produced quality goods to maintain our global economic position. To be competitive, the United States must train and maintain an integrated, knowledge based management/work force to rapidly transfer the technical advances from the labs to commercial production. Much of our technology has been commercialized, such as lasers, robotics, biogenetics, computer-aided design, as well as telecommunications. Furthermore, many of these advanced technologies are being used in the health care delivery system.

Technological advances have already had significant effect on the cost of care, average lengths of stay in hospitals, staffing requirements, and treatment modalities. The trend is to use technology to perform more treatment and surgical procedures--as well as diagnostic tests--in the outpatient setting. However, even now and into the future, hospitals remain a crucial resource as a back-up for complex procedures or complicated treatments. Even though outpatient procedures have increased due to high-tech

medicine, this has not always reduced medical care costs because the procedure was an adjunct to existing procedures or "the new technology provided physicians the means to treat previously untreatable disorders." ⁵²

One of the most cost-effective technological means of reducing disease is through vaccines. "Recent advances in genetic engineering, combined with improved understanding of the human immune system, promise to produce safer, more convenient vaccines, and maybe even prevent AIDS."⁵³ Genetic engineering is already a developed science. Many labs have randomly isolated and sequenced gene fragments. Presently the National Institute of Health has one of the largest biological research program underway--to identify, localize, and sequence all 50,000 to 100,000 genes in humans.⁵⁴ Control over the use of these human genes will raise many ethical and philosophical questions.

In summary, our society will continue to be concerned with the rising health care costs because of affordability and accessibility problems. These problems will cause new ethical dilemmas and will be compounded by the aging of the American population and the declining formal educational system. As the elderly population increases and substantial numbers of our youth fail to acquire the educational skills for employment, the issue of private or public health will become a more controversial issue as more demand is placed on constrained resources.

New technologies will revolutionize our society. They will change our way of life as well as how we do business. While these

technologies will offer employment opportunities, many will require advanced technical skills. These forces of advanced technology will impact greatly on the health care delivery system. Future medical technologies will provide improved health care, but at what cost? And for whom? The DoD Health Care System must respond to these trends, just as our entire system must respond.

The DoD System: Challenges for the Future

A nation-state's ability to achieve its national interests depends upon primary means--political, economic, and military--as well as associated means--social and technological. Although these elements of national power are interrelated and interdependent, I believe the economical element dominates in our democratic system. Generally, economic forces influence societal and political systems. We must understand this concept when we are attempting to carry out societal or political changes. From this premise, I will analyze the forces (trends and issues) exerting pressures on the DoD Health Care System and propose future DoD health care management systems for feasible DoD health care missions. The following forces will exert pressures on the DoD Health Care System: (1) affordable and accessible health care and (2) the interdependence of economics, society, and technology.

Affordable and Accessible Health Care

Increased demand for improved health care and lack of sufficient funds to pay for sharply rising health costs have made health care a critical economical, social, and political issue. All components of the health care system--consumers, suppliers, employers, private health insurers, and public/government agencies--have not only a vested interest in the accessibility and affordability of health care but also play an important role in the delivery costs of quality health care.

Americans' perceptions and heightened expectations have drastically increased the demands on the health care system. Jane E. Brody, a personal health columnist and a science writer for the New York Times, recently observed that "depending on the statistics you quote, Americans are healthier today than 60 years ago or they suffer more illness. While longevity has increased by approximately 30 years, at the same time, Americans report twice as many acute illnesses and longer lasting pains. . . . Since Americans aren't really that sick, these findings no doubt reflect a change in perceptions and expectations. . . . The fact is, middle-class Americans are privileged to be able to worry about minor ailments."⁵⁵ The same perceptions and demands occur in the DoD Health Care System. Since there are no financial costs to individuals, many DoD beneficiaries seek health care from military providers for minor ailments.

While Americans want the best care money can buy, many are

finding that they can no longer afford the high costs of medical care. Generally, most Americans have depended on third party insurance to pay their true health care costs. Now the costs are coming back to them because private health insurance companies--to control costs--are covering less, charging more, denying claims, or canceling policies. At the same time, many poor people cannot get access to Medicaid. An estimated 35 to 38 million Americans have no health care insurance of any kind--either public or private. Still, there remains a prevailing attitude--from our implicit societal view--that health care is a human right and that everyone deserves the best health care that money can buy. But no one wants to pay a higher percentage of the costs, much less pay the full costs.

For example, consider the enactment of the Medicare Catastrophic Coverage Act of 1988 and its repeal by Congress in 1989 because of sharp criticism on the part of millions of senior citizens. The act "marked the largest expansion in the Medicare program's history. . . and offered expanded benefits for hospital coverage, skilled-nursing care, home-health care, respite care, and prescription drugs."⁵⁶ While the senior citizens welcomed the benefits, they objected greatly to the cost of the increased coverage; the annual cost had been projected to increase from \$297 in 1988 to \$571 in 1993. With the percentage of elderly Americans increasing, this issue will certainly become even more volatile in the future.

Medicare and Medicaid are two of the most expensive major

benefit programs in the United States. Changing mortality trends have resulted in a growing proportion of the elderly living to be very old, which will raise Medicare costs even more. These costs, coupled with the changing medical treatments, have made health care benefits extremely difficult to control. This impacts on the DoD Health Care System because increased CHAMPUS costs have mirrored the increased Medicaid and Medicare costs. It is projected that CHAMPUS costs will go up \$200 million in 1993 to a total annual cost of \$3.9 billion.⁵⁷

In a March 1991 DoD review of health care costs, the following was noted:

"The Military Health Services System (MHSS) is, in many ways, a mirror image of the national health care system and subject to the same high inflation and costly technology affecting all health care providers. . . . Between 1985 and 1990, DoD health care costs increased by 55 percent to an estimated \$13 billion [annually]. This cost is expected to continue to rise, even in the face of proposed force restructuring and reductions. One reason for this is that retirees, their dependents, and survivors constitute 43 percent of the beneficiary population. They require more intensive, frequent, and expensive types of health care delivery than do active duty personnel and their beneficiaries. This group will not decrease in the near future."⁵⁸

While active duty military members have all of their health care costs covered, family members and retirees are covered under CHAMPUS when they obtain care from civilian providers. In 1988, CHAMPUS Reform Initiatives--CHAMPUS Prime and Extra--were introduced as a five year test in California and Hawaii to lower costs to military families. While these programs saved military

family members \$15 million a year, the future of these programs is unknown. In 1991, Congress passed conflicting bills. One bill extended the test past the February 1, 1993 expiration date and extended the program to other states, but another bill forbade its expansion or extension.⁵⁹

Reacting to Congressional pressures to control health care costs, the ASD(HA) proposed a new program, Coordinated Care. This new program will replace the CHAMPUS Reform Initiatives as well as be implemented throughout the DoD Health Care System. This new program will not discount standard CHAMPUS costs, but will actually require family members to pay a higher deductible before health care is covered by CHAMPUS.

The Coordinated Care Program proposed by the ASD(HA) is designed to control health care costs through greater accountability and efficiency in the health care system. The "strategy of the Coordinated Care Program is to achieve optimal balance for the classic triangle of health care: Access, Quality, and Cost."⁶⁰ Responsibility will be jointly shared by beneficiaries and providers. The program calls for optimal use of the military health care system whenever possible before referral to civilian health care providers. There will be automatic enrollment for active duty members, but voluntary enrollment for all other beneficiaries. Local Military Treatment Facility (MTF) Commanders must establish a network of providers, which can include civilian providers--most likely from a Health Maintenance Organization (HMO) or Preferred Provider Organization (PPO).

Participators will be assigned or be able to select a primary care manger. The advantage to the subscriber is lower out-of-pocket costs, but the disadvantage is the limited flexibility in choice of providers and health care facilities. The non-participators will only be able to use MTFs for emergency care and pharmacy services, and will pay a higher out-of-pocket cost for CHAMPUS claims.⁶¹ Thus the ASD(HA) is attempting to control costs because inflation alone will drive up military health care costs from \$9.1 billion in 1992 to \$9.5 billion in 1993.

As the Coordinated Care Program is implemented, military health care costs will rise more, but should be offset by savings from CHAMPUS costs. The rapidly rising civilian health care costs and the lesser DoD Health Care System costs are the primary reasons why Congress directed the Defense Department Officials not to decrease the military medical personnel proportional to the rest of the force reduction.⁶² This political decision has generated a very controversial issue.

Initially, the Coordinated Care Program will be a success. However, as the increased number of beneficiaries place a greater demand on the system, many will opt out of the program because their "time costs" will be too great. They will elect to buy supplemental insurance, use CHAMPUS, and pay slightly higher out-of-pocket costs. This prediction mirrors the undeniable trend in both public and private sectors toward greater competition and free-market incentives to guide decision-making.⁶³ Freedom of choice is hard for Americans to give up. They would rather pay

more for their convenience and for their preferred source of care.

Economics, Society and Technology.

The world is being restructured at an unusually rapid pace. Not only governments but also large corporations are experiencing the general public's demands for political and social change. Both big business and governments are seeking ways to stimulate the economy in order to relieve many social problems. It is easy to see that economic forces are becoming more important each day as the world continues in a recession.

If the economic recession is not resolved soon, more and more Americans will find themselves out of work and without medical insurance. Many middle class workers will face the prospects of losing their savings, investments, and homes, especially if they are unfortunate enough to require hospitalization. It could well be the middle class loss of health care benefits--or their inability to meet costs without losing everything--that drives this nation to a National Health Insurance Program. Along with the elderly on Medicare and the poor on Medicaid, the unemployed middle class could provide the caldron in which congressional partisanship on health care is boiled away.

Recently 73 percent of physicians responded "Yes" when asked "Should everyone in the United States be guaranteed health insurance?"⁶⁴ This professional judgment portends systemic change. My research did not reveal a strong consensus for the United States

to implement a National Health Insurance Program, yet it did reveal a consensus that the U. S. should have universal health insurance. However, "guaranteeing health insurance for everyone doesn't mean that it has to be free--just that everyone can get it."⁶⁵

The most important question--presently an issue of debate in our Presidential election--is just how much of the cost individuals should be accountable for. This is an important question, because it raises the issue of American's responsibilities for their own care. This same question is important to our DoD Health Care System, because resource constraints will shift a greater share of the costs for medical care to our military families. If a National Health Insurance Program is passed, it will put great pressures on the DoD Health Care System to transfer the peacetime beneficiary health care mission to the civilian sector. This will produce great changes in the resulting DoD Health Care System.

The declining formal education system and the technology explosion pose a problem and a challenge for the DoD Health Care System. The DoD Health Care System will have to rely on the declining formal education system to provide employees while the civilian health care megaconglomerates will directly recruit promising persons for their own training and education programs. The great concern is whether the declining formal education system can provide sufficient skilled personnel needed to take advantage of the technological advances. If the indications persist that the declining formal educational system cannot provide these skilled personnel, then the DoD Health Care System will have to provide its

own educational programs or use incentives to entice health care workers from the civilian health conglomerates.

The current medical missions for the DoD Health Care System can be identified from the objectives given to the DoD Director of Administration and Management study group: (1) to provide medical services and support to the Armed Forces during combat operations; (2) to provide medical services and support in peacetime to members of the Armed Forces, their dependents, and others entitled to medical care provided by the DoD; and (3) to achieve fully both of the above objectives at the lowest feasible cost to the taxpayers.

Clearly, costs and budgets were more significant concerns of the management study group than were national military strategy, doctrine, or force-structure. Yet, one of the most significant force-structure questions with regard to the Defense Department budget is the question of the future roles and missions of the Medical Departments of the Army, Navy, and Air Force. While the organization and some beneficial missions may change, readiness of medical services for combat operations will continue in some form or fashion.

The mission to provide medical services and support to the Armed Forces during combat operations requires medical readiness. These are inseparable missions that will always be a part of the military services; no civilian agency will train or provide combat medical care. Even so, the medical departments of the Armed Forces face an uncertain future as components of their respective services, especially since many missions transcend traditional

service boundaries. Therefore the search for an optimum organization of medical functions within the DoD and the most effective management system to direct them will continue.

Some planners believe that readiness and benefit missions are complementary, not mutually exclusive. Thus they see the need for an organization that integrates these missions. The Director of Administration and Management study concluded that "the medical readiness and health benefit delivery missions are too closely connected to be separately managed. A single accountable official should be responsible and have the authority to manage resources and oversee programs for both missions."⁶⁶

While I agree with this, I also believe the missions of providing health services, supporting military operations in peacetime and wartime, and maintaining wartime medical readiness--in a constrained resource environment--require more than the current cooperating Military Health Services Systems can deliver. It will require a centrally structured departmental level organization to promote and oversee cost containment initiatives, fight for modern medical information systems, and make critical decisions on readiness issues.

The current DoD's philosophy is "to centralize policies, procedures, standards, and systems but decentralize their execution. This has lead to major organizational changes that are improving operational effectiveness. The Defense Department also is reducing the cost of doing business by cutting excess infrastructure, eliminating redundant functions and initiating

common business practices."⁶⁷

The question for military medicine in the future is who will influence Congress more, the senior DoD civilian and military leaders or the retirees and family member beneficiaries? The answer to that question, coupled with the answer to the National Health Insurance question, will determine the design for the DoD Health Care System.

Without National Health Insurance, the DoD will retain the peacetime medical benefit mission. For this situation the optimum DoD Health Care Management System would be a Defense Health Agency (DHA). The Defense Logistics Agency (DLA) provides a model for this type of management system.

If a National Health Insurance Program was implemented, the military peacetime medical benefit mission would be questioned since a "federal beneficiary is a federal beneficiary." This means the peacetime medical benefit mission could easily be turned over to the civilian health care system. This in turn would create great pressures to drawdown the DoD Health Care System. The number of physicians needed to take care of the active duty members and to do joint medical readiness training could be cut to the Table of Organization and Equipment (TO&E) level. Under these circumstances, the optimum DoD Health Care Management System would be a Unified U.S. Medical Command (MEDCOM). The Unified U.S. Transportation Command provides a model for this type of management system.

Since October 1, 1991, DoD health care management has been a

system of centralized accountability--under the direction and control of the ASD(HA)--and decentralized execution--through which the respective military services execute their independent health care missions. This functional DHA is only a short step away from being formalized. As long as the DoD maintains the peacetime benefit care mission, a MEDCOM would be too controversial.

CONCLUSIONS AND RECOMMENDATIONS

Before the end of the Cold War, it was easy to identify the threat to U. S. Security. Now many senior military and civilian leaders are grappling not only with the threat issue but also with the shape of future U. S. National Strategy. With the end of the Cold War, the United States "has never been less threatened by foreign forces than it is today. But the unfortunate corollary is that never since the Great Depression has the threat to domestic well-being been greater."⁶⁸

Both Congress and the President have recognized that we have entered a new era of hope for peace which is allowing the U. S. to decrease its defense budget and military forces. DoD's outlays as a percentage of the Federal Budget and as a percentage of GNP have steadily declined over the past seven years.⁶⁹ This trend continued for the FY 1992-93 DoD Budget. How far the Defense Budget will be cut in the future is unknown, but it is projected to decline steadily. Eventually this will mean another large force reduction since many large weapon systems have already been cut.

These economic-driven forces will also cause changes in the management organization and missions of the DoD Health Care System.

General Sullivan, Chief of Staff, U.S. Army, gave his vision of the U.S. Army when he took his oath of office in June 1991. His vision was for the Army to be a "Strategic force trained and ready to fight and achieve decisive victory wherever and whenever America calls."⁷⁰ He went on to say that we must develop effective joint doctrine and maintain the edge as we reshape the force to best accommodate the new national military strategy.

Recently the General Accounting Office (GAO), the investigative arm of Congress, submitted a harsh new assessment of Army Medical preparedness during the Persian War. Many problems were found in training, personnel, and equipment areas. Richard Davis, the GAO director of Army issues, stated "Had the predicted number of casualties occurred, had the ground war started earlier, or later longer, the Army would not have been able to provide adequate care."⁷¹ The report went on to assert that "the Army's preoccupation with peacetime health care is damaging readiness and could have been tragic for U.S. troops in Operation Desert Storm."⁷² LTG Frank Ledford, the Army Surgeon General, stated, "he had no quarrel with the problems cited in the report, but he disagreed with its conclusions."⁷³

These problems show that a joint medical doctrine is needed for the DoD Health Care System and that medical units from all services need to do joint medical training. This comes at a time when all the Armed Forces have fully understood that joint warfare

requires a team effort. But this effort will surely come at a cost to the peacetime health care mission. Competition between the readiness and peacetime missions will only increase in the future.

Resource constraints and cost containment will become more critical each day. Scarcity will force us to choose between services and technologies and to make critical personnel decisions. If we concentrate our resources to maintain health care benefits, then fewer resources will be available for equitable service distribution.

The decision by Congress not to cut military medical personnel during the reduction in forces will leave a disproportionate number of medical department officers on active duty. Even though the political decision was based on cost containment and continued medical benefit care, it has nonetheless been very hard for many non-medical officers to accept.

The declining formal education system and the technological advances pose both a problem and a challenge for the DoD Health Care System. Civilian health care megaconglomerates will directly recruit persons for their own training and education programs. The DoD Health Care System will have to do likewise or provide an attractive wage and benefit package to entice health care workers from the private sector. A part of this package must be the opportunity to work with modern technology.

The peacetime health care mission to provide care to as many beneficiaries as possible will continue as a military mission. One way to lower health care costs is to incorporate modern information

technologies. Future information systems will allow faster access, faster processing, and faster storage of data. A complete network system in place could drastically cut down associated administrative costs and provide a better record for continuity of care. The computer-information system will be used by administrative personnel and by physicians as well.

Computers can already diagnose some disease better than physicians; they can more accurately predict which patients will live or die in intensive care units, they can determine the precise dosage and type of antibiotic to counter infection, and they can give advice by phone.

Kenneth Goodman, M.D., University of Miami Medical School, states "a veteran doctor can call in the human memory of thousands of cases to make a tricky diagnosis. But in some cases, a computer can scan its stored memory of millions of cases and in seconds make an even more accurate diagnosis."⁷⁴ As more clinical information is stored, computers will become even "smarter" in the future.

But an even greater potential is that physicians will be able to "talk" to a computer as he presently dictates. The computer will record the patient's history, his physical, the diagnosis, the care and related instructions--correctly spelled and syntax correct. It will forward prescriptions to the pharmacy. Then the record will be instantly placed in the patient's file, and the computer will continuously in realtime update the patients profile. While many of these system components are already available, they are very expensive. But in the near future, the DoD Health Care

System must have these total networked systems in place to be economically efficient and effective.

Keeping more medical personnel will not, in itself, be sufficient to meet the beneficiaries' increasing medical care demands. The new Coordinated Care Program, currently being implemented, will still require the use of civilian providers. Any future DoD Health Care System must strike a balance between cost containment and the ability to perform its missions, especially medical readiness. Otherwise, the greater focus on cost containment in the Coordinated Care Program will put added pressure on senior military medical leaders to perform the peacetime medical benefit mission at the expense of joint training.

With the implementation of the Coordinated Care Program, many MTF commanders will have to procure civilian primary care physicians. This could lead to competitive demands from different military services or regions on the same civilian resources--leading inevitably to higher costs. To avoid these higher costs, a DoD agency should negotiate with the civilian health care corporations. This would establish some centralized control over these resources and make for a smoother transition if a National Health Insurance Program is ever implemented. The optimum management system to accomplish these functions and to balance medical missions and readiness is a Defense Health Agency. The Defense Logistics Agency provides a model for this type of management system.

Under a National Health Insurance Program the military

beneficiary health care mission would probably be given to the civilian health care system. After the transition, the medical departments' personnel could be cut to the TO&E level. At that time, the resultant TO&E medical care system would best be managed by a Unified U.S. Medical Command (MEDCOM). The Unified U. S. Transportation Command provides a model for this type of management system.

During combat, the military medical support mission will not change greatly, except by means of advancing technologies and related treatments. Projected near-term military medical missions will be peacekeeping, nation building, and humanitarian aid support operations.

The DoD Health Care system needs a centralized management system for contracting civilian health care personnel, for coordinating resources, for procuring modern technology and equipment to enhance health care and reduce costs--and especially for ensuring a joint medical readiness system.

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